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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/086,495 | 02/27/2002 | Yan Li | M-12216 US | 2138 |

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EXAMINER

DINH, SON T

ART UNIT PAPER NUMBER

2824

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,495

Applicant(s)

LI ET AL. *MC*

Examiner

son t dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-32 and 45-58 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 33-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☒ Other: *East search history*.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13, 33-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terminology "can be" (claim 1, line 12; claim 3 line 4; claim 4, line 4; claim 33, line 10) makes the scope these claims indefinite. It has been held that the recitation that an element "can be" performing a function is not a positive limitation but only requires the ability to so perform. It dose not constitute a limitation in any patentable sense.

Claims 2, 5-13, 34-44 are rejected because of their dependency on the rejected claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (U.S. Patent NO 6,480, 419).

Figure 2 of Lee disclose a nonvolatile memory device comprising a plurality of storage units (112e, 112o) arranged into a plurality of columns (112e, 112o) along respective bit lines (BL0, BL1) each comprising a number of the storage units connected in series between a first select transistor (102e) and a second select transistor (122e), a number of word lines (WL0, WL1), and a control circuit (the circuit that generates VBL_e, VBL_o, and 230) for applying a bias voltage to the first and the second select transistors. It is noted that the voltage level on the gates of the first select transistors 102e and 102o is set independently, and the voltage level of the second transistors 122e and 122 o is set independently. Also, 112e would be one subset, and 112o is other subset.

With respect to claim 2, 112e and 112o are formed upon a distinct region on a substrate.

Allowable Subject Matter

Claims 14-32, 45-58 are allowed.

Claims 33-44 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 3-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or suggest a biasing circuit for biasing the a well in a memory device, wherein the voltage level of the well in one region is set independently of the voltage level in the well of the other region (claim 3); a biasing circuit for biasing the common source line of a memory device, wherein the voltage level of the common source line in one subset is set independently of the voltage level on the common source line in the other subsets (claim 4); a read circuit and a set of read registers connected to columns of the memory device for storing data from the memory cell in a column to which the register is connected during a read process (claim 9). ; a well control circuit connected to a substrate of a memory device for controlling the voltage applied to the well structure, wherein the voltage applied to the well structure being independently controlled (claim 33)

The following is an examiner's statement of reasons for allowance:

The prior art of record fail to teach or suggest a method for setting the voltage on the first and second select transistors of a memory device, wherein the voltage on the gate of the first select transistor is different than the voltage on the gates of the second select transistors (claim 14), wherein a voltage level on a well structure of a first subset concurrently with the setting a voltage level on a first of the word lines (claim 45).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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-Choi et al disclose a memory device having a select transistor.

-Yoshida teaches a memory device including a select transistor.

-Lee et al disclose a memory device having a select transistor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to son t dinh whose telephone number is 703-308-4120.

The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on 703-308-2816. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

S. Dinh
September 30, 2003



Son T. Dinh
Primary Examiner